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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,305	02/06/2002	Johann Oberhofer	70301/56912	9847
21874	7590	05/28/2004	EXAMINER	
EDWARDS & ANGELL, LLP			TENTONI, LEO B	
P.O. BOX 55874				
BOSTON, MA 02205			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,305

Applicant(s)

OBERHOFER ET AL.

Examiner

Leo B. Tentoni

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-99 is/are pending in the application.
- 4a) Of the above claim(s) 58, 59, 71, 82-84, 86 and 89-98 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-57, 60, 64-70, 72-75, 78-81, 85, 87, 88 and 99 is/are rejected.
- 7) ☒ Claim(s) 61-63, 76 and 77 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02062002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 44-57, 60-70, 72-81, 85, 87, 88 and 99 in the paper submitted on 06 May 2004 is acknowledged. The traversal is on the ground(s) that this application is a 371 entry into the national stage of a PCT application and the single inventive concept expressed in the claims is the controlled treatment or processing after forming of the object. This is not found persuasive because the groups of inventions lack the same or corresponding special technical feature(s) as set forth in the previous Office Action (paper mailed on 06 April 2004).

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 58, 59, 71, 82-84, 86 and 89-98 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the paper submitted on 06 May 2004.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

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Specification

4. The abstract of the disclosure is objected to because `` (Figure 3) '' (at the bottom) should be deleted. Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: On pages 1 and 2, all references to claims should be deleted. Appropriate headings should be used throughout the instant specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and

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potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 44, 45, 48-57, 60, 64-66, 69, 70, 72-75, 80, 81, 85, 87, 88 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor (U.S. Patent 5,846,370) in combination with any one of either Dickens, Jr. et al (U.S. Patent 5,304,329), Caldarise (U.S. Patent 5,662,158) or Russell et al (U.S. Patent 6,007,318).

O'Connor (see the entire document, in particular, col. 3, line 50 to col. 6, line 32) teaches a process of, and apparatus for, making a three-dimensional object as set forth in the instant claims, except that O'Connor does not teach controllably removing non-solidified powder material after forming the object, or apparatus for controlled removal of non-solidified powder material after producing the object (O'Connor does teach that unexposed material on the platform (or carrier) remains in powder form, and is retracted into the build chamber (or container) along with the object (col. 5, lines 34-37)). Dickens, Jr. et al (see the entire document, in particular, col. 4, lines 26-28), Caldarise (see the entire document, in particular, col. 9, lines 45-59) and Russell et al (see the entire document, in particular, col. 4, lines 48-67; col. 6, line 64 to col. 7, line 4) teach a process of, and apparatus for, making a three-dimensional object including controllably removing non-solidified powder material after forming the object (within the meaning set forth in the instant specification, including the use of a fluid), and

apparatus for controlled removal of non-solidified powder material after producing the object (within the meaning set forth in the instant specification, including apparatus for supplying a fluid) and such would have been obvious to one of ordinary skill in the art at the time the invention was made in O'Connor in view of any one of either Dickens, Jr. et al, Caldarise or Russell et al principally in order to remove the non-solidified powder material from the three-dimensional object.

9. Claims 46, 47 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor et al (U.S. Patent 5,846,370) in combination with any one of either Dickens, Jr. et al (U.S. Patent 5,304,329), Caldarise (U.S. Patent 5,662,158) or Russell et al (U.S. Patent 6,007,318) as applied to claims 44, 45, 48-57, 60, 64-66, 69, 70, 72-75, 80, 81, 85, 87, 88 and 99 above, and further in view of Newell et al (U.S. Patent 5,932,055).

Newell et al (see the entire document, in particular, col. 2, lines 4-24; col. 9, lines 39-41) teach a process of, and apparatus for, making a three-dimensional object including removing non-solidified powder material mechanically (e.g., by means of brushes) and such would have been obvious to one of ordinary skill in the art at the time the invention was made in O'Connor (in combination with any one of either Dickens, Jr. et al., Caldarise or Russell et al) in view of Newell et al principally in order to remove non-solidified powder material from the three-dimensional object.

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10. Claims 67, 68 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor et al (U.S. Patent 5,846,370) in combination with any one of either Dickens, Jr. et al (U.S. Patent 5,304,329), Caldarise (U.S. Patent 5,662,158) or Russell et al (U.S. Patent 6,007,318) as applied to claims 44, 45, 48-57, 60, 64-66, 69, 70, 72-75, 80, 81, 85, 87, 88 and 99 above, and further in view of Grube et al (WO 92/08592).

Grube et al (see the entire document, in particular, pages 2, 9 and 11-23) teach a process of, and apparatus for, making a three-dimensional object including controlling (and controller) ambient temperature of a container, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in O'Connor (in combination with any one of either Dickens, Jr. et al., Caldarise or Russell et al) in view of Grube et al principally in order to prevent damage (e.g., warpage) to the three-dimensional object.

Allowable Subject Matter

11. Claims 61-63, 76 and 77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner

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can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo B. Tentoni

Leo B. Tentoni
Primary Examiner
Art Unit 1732

lbt